

Amendments To Claims

1. (Currently Amended) A method for extracting a set of key-frames from a video, comprising ~~the steps of~~:

selecting a set of candidate key-frames from among a series of video frames in the video by performing a set of analyses on each video frame, each analysis selected to detect a meaningful content in the video such that the candidate key-frames comprise a subset of the video frames in the video;

arranging the candidate key-frames into a set of clusters;

selecting one of the candidate key-frames from each cluster in response to a relative importance of each candidate key-frame.

2. (Currently Amended) The method of claim 1, wherein ~~the step of~~ selecting a set of candidate key-frames includes ~~the step of~~ selecting a set of candidate key-frames in response to a camera motion in the video.

3. (Currently Amended) The method of claim 1, wherein ~~the step of~~ selecting a set of candidate key-frames includes ~~the step of~~ selecting a set of candidate key-frames in response to an object motion in the video.

4. (Currently Amended) The method of claim 1, wherein ~~the step of~~ selecting a set of candidate key-frames includes ~~the step of~~ selecting a set of candidate key-frames in response to a fast camera movement in the video.

5. (Currently Amended) The method of claim 1, wherein ~~the step of~~ selecting a set of candidate key-frames includes ~~the step of~~ selecting a set of candidate key-frames in response to a human face content in the video.

6. (Currently Amended) The method of claim 1, further comprising ~~the step of~~ selecting a set of candidate key-frames in response to an audio event in the video.

7. (Currently Amended) The method of claim 1, wherein ~~the step~~ of selecting one of the key-frames from each cluster includes ~~the step of~~ determining an importance score for each candidate key-frame.

8. (Currently Amended) The method of claim 7, wherein ~~the step~~ of determining an importance score for each candidate key-frame includes ~~the step of~~ determining an importance score in response to the meaningful content in each candidate key-frame.

9. (Currently Amended) The method of claim 1, wherein ~~the step~~ of selecting one of the key-frames from each cluster includes ~~the step of~~ selecting one of the key-frames in response to an image quality of each candidate key-frame.

10. (Currently Amended) The method of claim 1, further comprising ~~the step of~~ selecting multiple key-frames from each cluster and obtaining a user selection for the multiple key-frames.

11. (Original) The method of claim 1, wherein the analyses include an accumulative color histogram difference comparison of the video frames.

12. (Original) The method of claim 1, wherein the analyses include an accumulative color layout difference comparison of the video frames.

13. (Currently Amended) The method of claim 1, further comprising ~~the step of~~ obtaining a user selection from among a set of video frames in the video previous to each key-frame and a set of video frames in the video subsequent to each key-frame.

14. (Currently Amended) A key-frame extraction system, comprising:

a set of frame analyzers that each select a set of candidate key-frames from among a series of video frames in a video, each frame ~~analyzers~~ analyzer for detecting a meaningful

content in the video such that the candidate key-frames comprise a subset of the video frames in the video;

key-frame selector that arranges the candidate key-frames into a set of clusters and that selects one of the candidate key-frames from each cluster as a key-frame for the video in response to a relative importance of each candidate key-frame.

15. (Original) The key-frame extraction system of claim 14, further comprising an audio event detector that selects a set of candidate key-frames by detecting a set of audio events in the video.

16. (Original) The key-frame extraction system of claim 14, wherein the frame analyzers include a color histogram analyzer.

17. (Original) The key-frame extraction system of claim 14, wherein the frame analyzers include a color layout analyzer.

18. (Original) The key-frame extraction system of claim 14, wherein the frame analyzers include a fast camera motion detector.

19. (Original) The key-frame extraction system of claim 14, wherein the frame analyzers include a camera motion tracker.

20. (Original) The key-frame extraction system of claim 14, wherein the frame analyzers include an object motion analyzer.

21. (Original) The key-frame extraction system of claim 14, wherein the frame analyzers include a human face detector.

22. (Original) The key-frame extraction system of claim 14, further comprising a user interface for displaying a set of video frames in the video previous to each key-frame and a set of video frames in the video subsequent to each key-frame and for obtaining a user selection of one or more of the video frames.